

Application No. 09/972,268
Declaration under 37 CFR 1.131

3101-A

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No: 09/972,268
Applicants: Peter R. Baum, William C. Fanslow III, Timothy E. Lofton,
Eric A. Sorensen, and Adel Youakim
Filed: October 5, 2001
Title: NECTIN POLYPEPTIDES

TC/Art Unit: 1644
Examiner: Maher M. Haddad

Docket No.: 3101-A

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131

We, Peter R. Baum, William C. Fanslow III, Timothy E. Lofton, Eric A. Sorensen, and Adel Youakim, the undersigned, hereby declare that:

1. This Declaration is made by the inventors of the above-captioned patent application in order to establish a date of invention in the United States prior to April 1, 2000.
2. Prior to April 1, 2000, a DNA clone that encodes human nectin-3 polypeptide (also called "B7L4" polypeptide) had been isolated and its sequence determined in the United States by inventors named in the subject application, as evidenced by the Exhibits A and B enclosed herewith. The works described in Exhibits A and B were completed in this country prior to April 1, 2000.
3. Exhibit A is a copy of a page from one of the laboratory notebooks of Eric A. Sorensen, written in his handwriting, describing a restriction enzyme digest of an isolated lambda phage clone called "HuB7L4 11-1". All dates on the copy have been redacted.

4. Exhibit B (eight pages) is a copy of a computer printout that is incorporated into one of the laboratory notebooks of Eric A. Sorensen, showing the results of the sequencing of the HuB7L4 11-1 clone insert that was performed at the direction of Eric A. Sorensen. The amino acid sequence shown below the corresponding nucleotide sequences is that of human nectin-3 as presented in SEQ ID NO:2 of the above-captioned application (and is identical to amino acids 8 through 549 of SEQ ID NOs 4 and 6). The first page of Exhibit B indicates the location of a predicted signal sequence cleavage site, and the fourth page of Exhibit B indicates the location of the start of the transmembrane domain. All dates on the copy have been redacted.

5. Therefore, on a date prior to April 1, 2000, the inventors of the above-captioned application had determined the amino acid sequence of a human nectin-3 polypeptide including the extracellular domain of a mature form of human nectin-3.

6. As a person signing below: I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Peter R. Baum
Peter R. Baum

Date: July 7, 2003

William C. Fanslow III
William C. Fanslow III

Date: June 23, 2003

Timothy E. Lofton
Timothy E. Lofton

Date: 23 JUNE 2003

Eric A. Sorensen
Eric A. Sorensen

Date: June 24, 2003

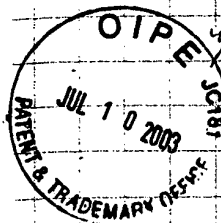
Adel Yeouakim
Adel Yeouakim

Date: June 24, 2003

rom Page No. 27

Ø DNA for HUB7C4 picks 11-1 and 13 (from KB library)
 cut in PEG for the 3 weeks I was on vacation.

Spun out Washed w/ 70% EtOH. Spd vac'd
 out heat. Resuspended o/n in 60 µl H₂O.



Digest Ø DNAs w/ EcoRI (NEB rxn, buffer) and w/ NotI (NEB buffer, Bst

- 1.) Ø DNA 11-1 w/ EcoRI
- 2.) " " w/ NotI
- 3.) Ø DNA 13 w/ EcoRI
- 4.) " " w/ NotI

4 µl Ø DNA

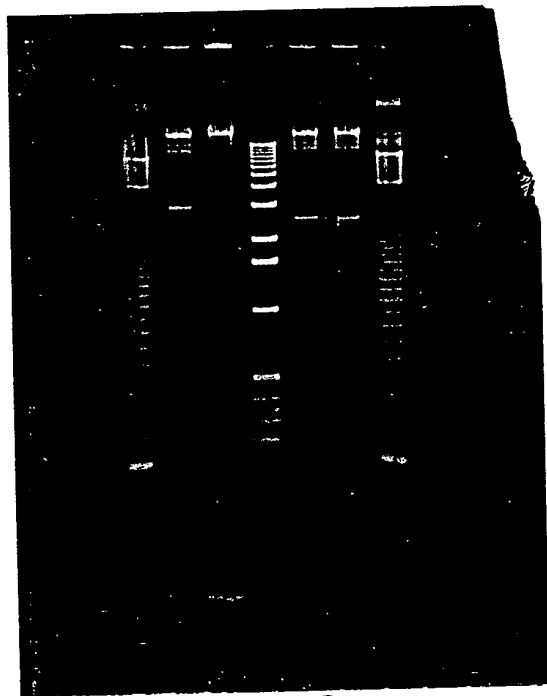
1.5 µl 10x buffer

.5 µl enzyme

9 µl H₂O

37°C 60-90'

11-1 @ 95.5 µg/ml
 # 13 @ 57.7 µg/ml



7055 p.80 LAR

RESULTS:

According to this gel, the clone #13 is way small compared to what I estimated by sequence & Pch. I guess I'll see what the DNA seq. like and I'm going to subclone the EcoRI fragment into pBS.

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Witnessed & Understood by me,

Date

Invented by

Date

Recorded by

WI
O I P E
JUL 10 2003
PATENT & TRADEMARK OFFICE

NspI
 AflIII
 BspLU11I
 MslI
 ATTGTGGAGCCACATGTACAGCAGTATGGGAAAGAATGTTTCATTAAAGTGTTTAATT
 181 -----+-----+-----+-----+-----+-----+-----+-----+-----+-----+ 240

77,85 p. 8

TAACACCTCGGTGTACAGTGTCTCATACCCCTTTCTTACAAAGTAATTTACAAATTAA

← 34054

a I V E P H V T A V W G K N V S L K C L I -

33686 →

GAAGTAAATGAAACCATAACACAGATTTTCATGGGAGAAGATACATGGCAAAGTTCACAG
241 -----+-----+-----+-----+ 300
CTTCATTTACTTTGGTATTGTGTCTAAAGTACCCTCTTCTATGTACCGTTTTCAAGTGTC
a E V N E T I T Q I S W E K I H G K S S Q -

XcmI

AloI

EarI

ACTGTTGCAGTTCACCATCCCCAATATGGATTCTCTGTTCAAGGAGAATATCAGGGAAGA
301 -----+-----+-----+-----+ 360
TGACAACGTCAAGTGGTAGGGTTATACCTAAGAGACAAGTTCCTCTTATAGTCCCTTCT
← 33685

a T V A V H H P Q Y G F S V Q G E Y Q G R -

DraI

GTCTTGTTTAAAAATTACTCACTTAATGATGCAACAATTACTCTGCATAACATAGGATTC
361 -----+-----+-----+-----+ 420
CAGAACAAATTTTAAATGAGTGAATTACTACGTTGTTAATGAGACGTATTGTATCCTAAG
a V L F K N Y S L N D A T I T L H N I G F -

BmrI

TCTGATTCTGGAAAATACATCTGCAAAGCTGTTACATTCCCGCTTGGAAATGCCAGTCC
421 -----+-----+-----+-----+ 480
AGACTAAGACCTTTTATGTAGACGTTTCGACAATGTAAGGGCGAACCTTTACGGGTCAGG
← 33687

a S D S G K Y I C K A V T F P L G N A Q S -

TCTACAACGTAACTGTGTTAGTTGAACCCACTGTGAGCCTGATAAAAGGGCCAGATTCT
481 -----+-----+-----+-----+ 540
AGATGTTGACATTGACACAATCAACTTGGGTGACACTCGGACTATTTCCCGGTCTAAGA
a S T T V T V L V E P T V S L I K G P D S -

AlwNI

TTAATTGATGGAGGAAATGAAACAGTAGCAGCCATTTGCATCGCAGCCACTGGAAAACCC
541 -----+-----+-----+-----+ 600
AATTAACCTACCTCCTTTACTTTGTTCATCGTTCGGTAAACGTAGCGTTCGGTGACCTTTTGGG
a L I D G G N E T V A A I C I A A T G K P -

BmrI

32121 →
GTTGCACATATTGACTGGGAAGGTGATCTTGGTGAAATGGAATCCACTACAACCTCTTTT
601 -----+-----+-----+-----+ 660
CAACGTGTATAACTGACCCTTCCACTAGAACCCTTTACCTTAGGTGATGTTGAAGAAAA
← 33688

a V A H I D W E G D L G E M E S T T T S F -

TatI
|

661 CCAAATGAAACGGCAACGATTATCAGCCAGTACAAGCTATTTCCAACCAGATTTGCTAGA 720
-----+-----+-----+-----+-----+-----+
GGTTTACTTTGCCGTTGCTAATAGTCGGTCATGTTTCGATAAAGGTTGGTCTAAACGATCT
P N E T A T I I S Q Y K L F P T R F A R -

MmeI BsbI StyI
| | |

721 GGAAGGCGAATTACTTGTGTTGTAAAACATCCAGCCTTGGAAAAGGACATCCGATACTCT 780
-----+-----+-----+-----+-----+-----+
CCTTCCGCTTAATGAACACAACATTTGTAGGTCGGAACCTTTTCCTGTAGGCTATGAGA
← 32122
G R R I T C V V K H P A L E K D I R Y S -

Eco57I
|

781 TTCATATTAGACATACAGTATGCTCCTGAAGTTTCGGTAACAGGATATGATGGAAATTGG 840
-----+-----+-----+-----+-----+-----+
AAGTATAATCTGTATGTCATACGAGGACTTCAAAGCCATTGTCTATACTACCTTTAACC
F I L D I Q Y A P E V S V T G Y D G N W -

BsaBI MmeI
| |

841 TTTGTAGGAAGAAAAGGTGTTAATCTCAAATGTAATGCTGATGCAAATCCACCACCCTTC 900
-----+-----+-----+-----+-----+-----+
AAACATCCTTCTTTCCACAATTAGAGTTTACATTACGACTACGTTTAGGTGGTGGGAAG
F V G R K G V N L K C N A D A N P P P F -

Eco57I
|

BspMI HaeI
| | |

901 AAATCTGTGTGGAGCAGGTTGGATGGACAATGGCCTGATGGTTTATTGGCTTCAGACAAT 960
-----+-----+-----+-----+-----+-----+
TTTAGACACACCTCGTCCAACCTACCTGTTACCGGACTACCAAATAACCGAAGTCTGTTA
K S V W S R L D G Q W P D G L L A S D N -

EarI
|

961 ACTCTTCATTTTGTCCATCCATTGACTTTCAATTATTCTGGTGTTTATATCTGTAAAGTG 1020
-----+-----+-----+-----+-----+-----+
TGAGAAGTAAAACAGGTAGGTAACTGAAAGTTAATAAGACCACAAATATAGACATTTAC
T L H F V H P L T F N Y S G V Y I C K V -

StyI DrdI BstYI Eco57I
| | | |

1021 ACCAATTCCTTGGTCAAAGAAGTGACCAAAAAGTCATCTACATTTTCAGATCCTCCTACT 1080
-----+-----+-----+-----+-----+-----+
TGGTTAAGGGAACCAAGTTTCTTCACTGGTTTTTCAGTAGATGTAAAGTCTAGGAGGATGA
T N S L G Q R S D Q K V I Y I S D P P T -

BstYI

1081 ACTACCACCCTTCAGCCTACAATTCACTGGCATCCCTCAACTGCTGACATCGAGGATCTA
-----+-----+-----+-----+-----+-----+ 1140
TGATGGTGGGAAGTCGGATGTTAAGTCACCGTAGGGAGTTGACGACTGTAGCTCCTAGAT
T T T L Q P T I Q W H P S T A D I E D L -

HincII

1141 GCAACAGAACCTAAAAAATTGCCCTTCCCATTTGTCAACTTTGGCAACAATTAAGGATGAC
-----+-----+-----+-----+-----+ 1200
CGTTGTCTTGGATTTTTTAACGGGAAGGGTAACAGTTGAAACCGTTGTTAATTCCTACTG
A T E P K K L P F P L S T L A T I K D D -

MunI TaqII BanII ScaI
 BsrDI (Bgl2) Bsp1286I EarI TatI

1201 ACAATTGCCACGATCATTGCTAGTGTAGTGGGTGGGGCTCTCTTCATAGTACTTGTAAGT
-----+-----+-----+-----+-----+ 1260
TGTTAACGGTGCTAGTAACGATCACATCACCCACCCCGAGAGAAGTATCATGAACATTCA
TGTTAACGGTGC-TCTAGA ←32124

Start Transmembrane ^ <--34357

a T I A T I I A S V V G G A L F I V L V S -

Bsp24I

1261 SspI SfcI BbsI Bsp24I
| | | |
GTTTTGGCTGGAATATTCTGCTATAGGAGAAGACGGACGTTTCGTGGAGACTACTTTGCC
-----+-----+-----+-----+-----+ 1320
CAAAACCGACCTTATAAGACGATATCCTCTTCTGCCTGCAAAGCACCTCTGATGAAACGG
V L A G I F C Y R R R R T F R G D Y F A -

1321 AAGAACTACATTCCACCATCAGATATGCAAAAAGAATCACAAATAGATGTTCTTCAACAA
-----+-----+-----+-----+-----+ 1380
TTCTTGATGTAAGGTGGTAGTCTATACGTTTTTCTTAGTGTTTATCTACAAGAAGTTGTT
← 32125

a K N Y I P P S D M Q K E S Q I D V L Q Q -

1381 GATGAGCTTGATTCTTACCCAGACAGTGTAAGAAAGAAAACAAAATCCAGTGAACAAT
-----+-----+-----+-----+-----+ 1440
CTACTCGAACTAAGAATGGGTCTGTACATTTTTTCTTTTGTGTTTGTAGTCACTTGTTA
D E L D S Y P D S V K K E N K N P V N N -

BsaAI EarI
SnaBI SapI

1441 CTAATACGTAAAGACTATTTAGAAGAGCCTGAAAAAAGTCACTGGAACAATGTAGAAAAT
-----+-----+-----+-----+-----+ 1500
GATTATGCATTTCTGATAATCTTCTCGGACTTTTTTGAGTCACCTTGTTACATCTTTTA
L I R K D Y L E E P E K T Q W N N V E N -

BglII
 BstYI
 |
 CTC AATAGGTTT GAAAGACCAATGGATTATTATGAAGATCTAAAAATGGGAATGAAGTTT
 1501 -----+-----+-----+-----+-----+-----+-----+ 1560
 GAGTTATCCAACTTTCTCGTTACCTAATAATACTTCTAGATTTTTACCCTTACTTCAAA
 L N R F E R P M D Y Y E D L K M G M K F -

 MslI
 NspI
 AflIII
 BspLU11I
 MslI
 |
 GTCAGTGATGAACATTATGATGAAAACGAAGATGACTTAGTTTCACATGTAGATGGTTCC
 1561 -----+-----+-----+-----+-----+-----+-----+ 1620
 CAGTCACTACTTGTAATACTACTTTTGCTTCTACTGAATCAAAGTGTACATCTACCAAGG
 V S D E H Y D E N E D D L V S H V D G S -

 BsrGI
 TatI
 (NotI)
 GTAATTTCCAGGAGGGAGTGGTATGTTTAGCAACCACTGAATGTGACTTAACTATGTACA
 1621 -----+-----+-----+-----+-----+-----+-----+ 1680
 CATTAAAGGTCCTCCCTCACCATACAAATCGTTGGTGAAGTACACTGAATTGATACATGT
 <--34358 -CGCCGGCG
 V I S R R E W Y V * <--36018

 SpeI BclI
 | |
 ATGTTCACTCACACTAGTTGATCATTTCAGATTGTTTCATACTTTTCTTGAGGAAGAAT
 1681 -----+-----+-----+-----+-----+-----+-----+ 1740
 TACAAGTAAGTGTGATCAACTAGTAAAAGTCTAACAAGTATGAAAAAGAACTCCTTCTTA

 HindIII Bce83I HindIII
 | | |
 AAGCTTTTTCAAGTTGATTTTCAAGCTTACTTTTTATATTCTAATCTGACAAATGAAAAT
 1741 -----+-----+-----+-----+-----+-----+-----+ 1800
 TTCGAAAAAGTTCAACTAAAAGTTCGAATGAAAAATATAAGATTAGACTGTTTACTTTTA

 TatI
 Bce83I
 | |
 GTAAATCTGAGTTCAGTGTATCTAAGCTGCTTTACAATTTTTTTTTCAATGCTGTACTAC
 1801 -----+-----+-----+-----+-----+-----+-----+ 1860
 CATTTTAGACTCAAGTCACATAGATTTCGACGAAATGTTAAAAAAGTTACGACATGATG

 ApoI
 DraI
 SmlI SwaI ScaI
 | | |
 TGTCTCAAGATTTAAATTTTAAATGCAGAGTACTTTATTGGTGTGAGGCACACAGGTAAGA
 1861 -----+-----+-----+-----+-----+-----+-----+ 1920


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ACAGAGTTCTAAATTTAAAATTACGTCTCATGAAATAACCACACTCCGTGTGTCCATTCT

      HincII                      ApoI      DraI
      |                          |          |
AGAAATGTCAACATTAAATGTATGACTTACTTGGTACAAAAATTTTTTAAAAAGGGAAGT
1921 -----+-----+-----+-----+-----+-----+-----+ 1980
TCTTTACAGTTGTAATTTACATACTGAATGAACCATGTTTTTAAAAAATTTTCCCTTGA

                        Bce83I      Tth111II
                        |          |
ACCTTGACATTGTGTATTAAATGTTTACCTAAGACTATAATCTCAAGTATGATGTTTGGT
1981 -----+-----+-----+-----+-----+-----+-----+ 2040
TGGAAGTGTAAACACATAATTTACAAATGGATTCTGATATTAGAGTTCATACTACAAACAA

                        BtsI
                        HaeIV
                        ApoI      Hin4I
                        |          |
TAACATATACCTCTCAAAATTTATCACCCTCAATGACACTGCATCAAAATTGACTATAA
2041 -----+-----+-----+-----+-----+-----+-----+ 2100
ATTGTATATGGAGAGTTTTTAAATAGTGGTGAGTTACTGTGACGTAGTTTTTAAGTATATT

                        SspI                      SspI
                        |                          |
AACTAATTCAAGAAATATTTATATATATTTTTTAATATACAAAAAATATTTAGCCTGATG
2101 -----+-----+-----+-----+-----+-----+-----+ 2160
TTGATTAAGTTCTTTATAAATATATATAAAAAATTATATGTTTTTTATAAATCGGACTAC

                        Tth111II
                        |
GAATGGCTTTCCTTTTCAAACATTATTTTCTAAGTTTCTATACAAATGAAATCTTTACCT
2161 -----+-----+-----+-----+-----+-----+-----+ 2220
CTTACCGAAAGGAAAAGTTTGTAAATAAAAGATTCAAAGATATGTTTACTTTAGAAATGGA

      MslI
      VspI                      SfcI
      |                          |
CTGCATATTAATGAGCCTTGCCATAATTACTGTAGAGTGGCTTTTCAAAGATATTTTGGT
2221 -----+-----+-----+-----+-----+-----+-----+ 2280
GACGTATAATTACTCGGAACGGTATTAATGACATCTCACCGAAAAGTTTCTATAAAACAA

                        EarI
                        SapI
                        |
GCACTAAAGTGTGGTAGTAAACTCAGTGAACATGATGTGTGGAAGAGCATAATTAGCTG
2281 -----+-----+-----+-----+-----+-----+-----+ 2340
CGTGATTTTGACACCATCATTTGAGTCACTTGACTACACACCTTCTCGTATTAATCGAC

      SspI                      BspMI
      |                          |
GTCAATATTTTGTCCAAAATACCTGCAAGAGTAATAAAATACATACCTTTCAAACATGA
2341 -----+-----+-----+-----+-----+-----+-----+ 2400
CAGTTATAAAAACAGGTTTTATGGACGTTCTCATTATTTTATGTATGGAAAGTTTGTACT

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Tth1111I
|
TAATTATTAGTTTTTTTTTTCCTTCTGGAACATGGATTTTGGTACATTAGCAGTAGCCT
2401 -----+-----+-----+-----+-----+-----+-----+ 2460
ATTAATAATCAAAAAAAAAAAGGAAAGACCTTGTACCTAAAACCATGTAATCGTCATCGGA

TATTTTAATGCTTTTATGTCCTAAACATACTAATAGAAATGAAAAGACGCAGAGAGAGCAT
2461 -----+-----+-----+-----+-----+-----+-----+ 2520
ATAAAATTACGAAATACAGGATTGTATGATTATCTTTACTTTTCTGCGTCTCTCTCGTA

                SpeI
                ScaI |
                TatI |||
                Eco57I |
                SfcI |
                ApoI |
TTCGGAATACTGAAGTACTAGTTTTAGAAATGAGACTTTCAGCCAACAATCTATAGAAAG
2521 -----+-----+-----+-----+-----+-----+-----+ 2580
AAGCCTTATGACTTCATGATCAAAATCTTTACTCTGAAAGTCGGTTGTAGATATCTTTC

                                                BsrGI
                                                TatI
                                                |
AATTTTATGGACCATCTTGTTTTAGTTATTTAATGTTGATGTTGTTCAAATGGGTAAATG
2581 -----+-----+-----+-----+-----+-----+-----+ 2640
TTAAATACCTGGTAGAACAAAATCAATAAATTACAAC TACAACAAGTTTACCCATTTAC

                ApoI
                |
TACAGAAAGAAAATTTTAGAGTAAACTTGGAACCTTGGATATAACTAGAAAAAACTAGAT
2641 -----+-----+-----+-----+-----+-----+-----+ 2700
ATGTCTTTCTTTTAAATCTCATTGTAACCTGAAACCTATATTGATCTTTTTTGATCTA

                                BsmI
                                |
TATAGAATTAGTCGGTAACACTTGCTAATGGACATTGGCATTTCATCTCCTTTTTCCTCCT
2701 -----+-----+-----+-----+-----+-----+-----+ 2760
ATATCTTAATCAGCCATTGTGAACGATTACCTGTAACCGTAAGTAGAGGAAAAAGGAGGA

AAGTGATATGTATGTGTTTTAAGATTTCTGTTTTTACGATTAAAACTGGAAACATGAGGTT
2761 -----+-----+-----+-----+-----+-----+-----+ 2820
TTCACATACATACACAAAATCTAAAGACAAAATGCTAATTTTGACCTTTGTACTCCAA

TTTGTTTTTTGTTTTTTTACATAATTACATATATTCCTTCTGAATCATTTATCTTTTGAG
2821 -----+-----+-----+-----+-----+-----+-----+ 2880
AAAACAAAACAAAAAATGTATTAATGTATATAAGGAAGACTTAGTAAATAGAAAATC

                Tth1111I
                |
                SfcI
                |
AAAGAAATGTTACCTAAACTTCAAATGTGCTTTTTGTTTGTGAGGTAATTAAATTGCTTC
2881 -----+-----+-----+-----+-----+-----+-----+ 2940
TTTCTTTACAATGATTTGAAGTTTACACGAAAAACAAACACTCCATTAATTTAACGAAG

```

TACAGTGGAGGCTTACAAAATTATTGTGACAACTATTTTGAAGCTGAAAGGATAGTTTTT
 2941 -----+-----+-----+-----+-----+ 3000
 ATGTCACCTCCGAATGTTTTAATAACACTGTTGATAAACTTCGACTTTCCTATCAAAAA
 CTATTGCTAAGTCATTTGAAAAAGTGACCATTTTGCCAGTGAAATGAAGTGAAGTTAGT
 3001 -----+-----+-----+-----+-----+ 3060
 GATAACGATTCACTAACTTTTCACTGGTAAACGGTCACTTTACTTCACCTTCAATCA
 AGGAGAATCATAAATTAAATATATTATTTTGTTAATAAAAAGGCAAAGTAGTAGTACTT
 3061 -----+-----+-----+-----+-----+ 3120
 TCCTCTTAGTATTTAATTTATATAATAAAACAATTATTTTCCGTTTCATCATCCATGAA

 ApoI
 EcoRI
 BsiEI
 EaeI
 EagI
 GdiII
 NotI
 MspAII
 DraI
 SspI
 TTTAAACCCTCCCAACCAGCCCTTTCTCAATATTCATCAAATCTAAACAGCGGCCGCGA
 3121 -----+-----+-----+-----+-----+ 3180
 AAATTTGGGAGGGTTGGTCGGGAAAGAGTTATAAGTAGTTTAGATTTTGTCTCGCCGGCGCT
 ATTCAGC
 3181 ----- 3187
 TAAGTCG

Enzymes that do cut:

AflIII	AloI	AlwNI	ApoI	BanI	BanII	BbsI	Bce83I
BclI	BglII	BmrI	BplI	BpmI	Bpu10I	BsaAI	BsaBI
BsaHI	BsaXI	BsbI	BseRI	BsiEI	BsmI	Bsp24I	Bsp1286I
BspGI	BspLU11I	BspMI	BsrDI	BsrGI	BstYI	BtsI	DraI
DrdI	DrdII	EaeI	EagI	EarI	Eco57I	EcoRI	GdiII
HaeI	HaeIV	Hin4I	HincII	HindIII	MmeI	MslI	MspAII
MunI	NotI	NspI	PstI	SapI	ScaI	SfcI	SmlI
SnaBI	SpeI	SspI	StyI	SwaI	TaqII	TatI	Tth1111I
VspI	XcmI						

Enzymes that do not cut:

AarI	AatII	AccI	AceIII	AclI	AflIII	AhdI	ApaI
ApalI	AscI	AvaI	AvrII	BaeI	BamHI	BbvCI	BcgI
BciVI	BglI	BmgI	Bpu1102I	BsaI	BsaWI	BseSI	BsgI
BsiHKAII	BsmBI	BspEI	BsrBI	BsrFI	BssHII	BssSI	BstAPI
BstDSI	BstEII	BstXI	BstZ17I	Bsu36I	ClaI	DraIII	EciI
Eco47III	EcoNI	EcoO109I	EcoRV	FseI	FspI	HaeII	HgiEII
HpaI	KpnI	MluI	MscI	NarI	NcoI	NdeI	NgoAIV
NheI	NruI	NsiI	NspV	PacI	Pfl1108I	PflMI	PinAI
PmeI	PmlI	PpiI	PshAI	Psp5II	PvuI	PvuII	RcaI
RleAI	RsrII	SacI	SacII	SalI	SanDI	SbfI	SexAI
SfiI	SgfI	SgrAI	SmaI	SphI	SrfI	Sse8647I	StuI
SunI	Tth111I	XbaI	XhoI	XmnI			